Docket CT-DST-1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of SCOUTEN et al)	Examiner	S. K. Webb
Serial No. 10/036,231)	Art Unit	3731
Filed December 24, 2001)		

Title: STEREOTAXIC MANIPULATOR WITH RETROFITTED LINEAR SCALES AND DIGITAL DISPLAY DEVICE

******************* CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA

22313-1450, on 3 May 2005. Name of Registered Representative: Patrick D. Kelly

Signature:

FIRST RESPONSE

This Response is submitted in reply to an Office Action dated November 3, 2004. A petition for a 3-month extension of time is enclosed. A corrected Figure 1 with the legend "Prior Art", and a corrected Abstract, are also enclosed.

Also enclosed are two signed affidavits, from Douglas Martin, and Charles Scouten. These affidavits describe facts and events that clearly prove the invention was non-obvious to skilled experts who actually work in this field of art.

To place those two affidavits in context, the Examiner should consider the following background information on the relevant industry segment and companies that are involved:

(1) There is not a large market for stereotaxic holders and

manipulators for use with rats, mice, and other small animals. These units do not wear out, and once a lab has purchased one, it will keep and use it for decades. Essentially all laboratories that need one of these units (mainly at medical schools, pharmaceutical companies, etc.) already have one, and any new purchases, from new labs being set up, occur only at a slow pace.

- (2) There are three companies in America that compete directly against each other, for that small and limited market. The first company in time, Kopf Instruments, became the pioneer in this field, about 30 or 40 years ago, after David Kopf created some highly useful developments that lifted stereotaxic manipulators for small animals up to a higher, better plane. That company remained dominant until its patents expired, then it was challenged by the Stoelting company, a low-cost, low-overhead supplier of numerous different products for laboratories.
- (3) Neither of those two companies created or introduced any important new developments in that stable and mature line of products, until everything changed a few years ago, when a new company, myNeuroLab (a subsidiary of Coretech Holdings) launched a major round of new improvements.

Accordingly, the three companies that compete against each other, to sell stereotaxic manipulators to a small and limited market (i.e., for laboratory use with small animals) are Kopf Instruments, Stoelting, and myNeuroLab/Coretech.

- (3) Because stereotaxic manipulators have only a small and limited market, and because three companies must compete directly against each other for that small and limited market, tight control over manufacturing and other costs (including research and overhead costs) is extremely important, in this particular product line. As a result, the competing companies do not and cannot invest very large sums of money in trying to evaluate, test, adapt, develop, and then advertise and market potentially very expensive "add-ons" or enhancements, imported from other fields of research.
- (4) Without question or argument, extraordinarily sophisticated computerized manipulator systems have been

developed, for use in human surgery. As just one example, computerized manipulators have been developed that compensate for the motion of a beating human heart, during each heartbeat; these actually allow a surgeon to carry out coronary artery bypass grafting, on a still-beating heart, while the surgeon looks at an altered computerized image of the heart that appears to be stable, motionless, and not beating. Those computerized systems are amazing, but they are also amazingly expensive, both in terms of up-front costs, and in terms of training and other requirements. Those costs can be tolerated, for human surgery, because of staggeringly high costs and expenses of open-heart surgery, among humans. However, there is a giant and gaping difference between the levels of money spent on human surgery and medical care, and the levels of money spent by laboratories buying stereotaxic manipulators for rats.

(5) In addition to the cost pressures and competitive pressures, this particular type of product and field tends to be resistant to change, because of various training and use factors that are briefly noted on pages 13 and 14 of the application. These involve factors ranging from the tedium and difficulty of using analog Vernier scales, to the problems that are encountered when older professors must try to teach young people who do not speak English as their native language, how to use stereotaxic manipulators. Due to such factors, and due to how these types of factors filter down through the existing base of skills in this field (especially when the pressure is enormous and relentless to spend any available time writing more research grant applications), researchers who already know how to use existing stereotaxic manipulators on rats generally are not eager to have to spend hours of time, effort, and energy learning (and teaching others) how to use different and altered systems that no longer work the way they are accustomed to, and comfortable with. If a small company were to show up and tell prospective purchasers, "We've redesigned stereotaxic manipulators, and have a new and different model with a completely new and different set of tools that were initially developed in computerized machine shops,"

that company would likely be met with a cold stare or open hostility from researchers who have already been using stereotaxic manipulators for years.

The foregoing is background information, which leads directly to the facts and events described in the enclosed affidavits.

The people who created the subject invention first announced and displayed that unit at an industry trade show, in November 2001. They did so at a booth rented by myNeuroLab/Coretech, the assignee and owner of the patent application. At that trade show, technical employees for both Kopf Instruments, and the Stoelting company, visited the myNeuroLab/Coretech booth, and saw the new device. Those employees of both Kopf and Stoelting did all they could to study and examine the new system, within the constraints of a trade show. This type of interchange is standard practice, in this kind of business; the employees of Kopf and Stoelting made no effort to hide who they were, who they were working for, and why there were so interested in the new unit that was being announced and displayed by the myNeuroLab/Coretech company. Those employees of Kopf and Stoelting were free to ask any questions they wanted to ask about the new unit, and they could even have their friends and acquaintances at the trade show go up to the booth and ask similar questions, in the hope of finding out more than the myNeuroLab/Coretech employees would readily disclose to a direct competitor. Those practices are fair, accepted, understood, and part of normal competition in that business.

The interesting part is this: BOTH of those two companies set out to try to copy, duplicate, and mimic the new unit from myNeuroLab/Coretech, after they saw it at the trade show in November 2001. Both competitor companies began working on trying to create "knock-off" versions of what they had seen.

However, NEITHER of those two companies managed to succeed, on their own. Even though they already employed entire teams of people who had true and genuine levels of skill in the arts that related to designing and building stereotaxic manipulators for use with small animals, and even though their employees had seen

an actual working copy of the system, up close and in person, those two competitor companies simply could not duplicate what the Applicant had created.

That fact, in itself, offers compelling evidence, and even proof, that the invention was NOT merely "obvious to anyone with ordinary skill in the art."

What actually happened was that BOTH of those two competitor companies, Kopf and Stoelting, became frustrated due to months of failure and lack of progress; so, they took steps to obtain an actual copy of the system being sold by myNeuroLab/Coretech.

Both competitors did so by using "undisclosed agents" (i.e., they induced someone they knew, who worked at a different location, to purchase a unit from myNeuroLab/Coretech, and the undisclosed agent then forwarded the unit to either Kopf or Stoelting). Once those units purchased from myNeuroLab/Coretech were in their hands, the employees of Kopf or Stoelting partially disassembled them, studied any internal parts they were interested in, and then used that information to help them design and create "knockoff" copies.

Interestingly, the Kopf company had to hire an outside consultant, with an additional set of skills Kopf did not have in-house, to help them with their copying effort. Those facts are described in the affidavit by Charles Scouten.

Even more interestingly, it appears that someone at the Stoelting company committed an outright forgery (which is a crime), in order to try to return their unit and obtain a refund of the purchase price, while still trying to keep the facts about what they had done secret. The person whose name was forged (a certain Dr. Jackie Sampers, who works at a university) specifically and explicitly told the undersigned attorney that:

- (i) she does not work with stereotaxic holders at all,and merely forwarded the unopened package to Stoelting;
- (ii) she was persuaded to help Stoelting, because of statements by a Stoelting employee to the effect that Stoelting believed myNeuroLab/Coretech was infringing its patent, and Stoelting needed her help to correct an

injustice that was being committed against it (as known to the undersigned attorney, those statements by the Stoelting employee were totally and utterly false);

- (iii) she never signed the letter that was used to return the unit, and she did not even know the unit had been returned, until she received a rather surprising call from an employee of myNeuroLab, asking her why she had returned it; and,
- (iv) the signature which purports to be her signature is not her signature, and instead is a forgery.

The following crucial points must be kept in mind, as the statements in the enclosed affidavits are being considered:

- (1) NEITHER of those two competitor companies were able to duplicate, on their own, what the Applicant created, even after technical employees of both competitors had seen an actual working copy at a trade show, in November 2001;
- (2) after months of unsuccessful attempts to duplicate and copy the Applicant's system, BOTH of the competitor companies gave up, and spent thousands of dollars to purchase (using undisclosed agents) a working unit from the Applicant, which they could then disassemble, inspect, and analyze, closely and carefully, in their labs and workshops; and,
- (3) even though both companies purchased a working unit which they could disassemble and analyze, it still took BOTH of those companies a full year and a half, before they could copy and mimic the accomplishments of the Applicant.

Those assertions are supported by the two enclosed affidavits.

The undersigned attorney requests the Examiner to read and consider those affidavits; and, the undersigned respectfully suggests that the facts and events described in those affidavits offer compelling evidence, and even outright proof, that the invention emphatically was NOT "obvious to ANYONE with ordinary skill in the art".

Comments Specifically in Reply to Examiner's Assertions

The Office Action of Nov. 3 contained various assertions that do not give proper regard to the specific wording or clear meaning of the claims, or that do not reasonably and appropriately apply to the field of the invention.

For example, the Examiner stated on page 3, "The reader heads of the Saracione device are inherently retrofitted onto the stereotaxic holder, as they are manufactured separately." That disregards the actual language of the claims, as amended. For example, claim 1 was amended to state, "and wherein the manipulator system can be retrofitted onto a base plate of a CONVENTIONAL NON-DIGITAL stereotaxic holder" (emphasis added). In addition to distinguishing that phrase from the Saracione technology, it effectively encapsulates and summarizes a major accomplishment of the inventors. Instead of having to affix a manipulator with digital capability to a large, bulky, cumbersome, awkward holder and base plate that takes up an excessive amount of room on an already-crowded laboratory benchtop, the inventors figured out how to affix a digitized manipulator to a much smaller, simpler, more convenient system. Would it be simply "obvious" to do so? One might presume so, after a simple prima facie look; however, the facts set forth in the enclosed affidavits clearly indicate that even highly skilled companies with entire teams of workers could not figure out how to copy, duplicate, or mimic the system that was created by the Applicant company; and instead, those competitors had to purchase, disassemble, and inspect the internal mechanisms and components of the Applicant's system, before they could figure out how it actually could be done. Accordingly, the Examiner must take those facts into account, when determining how to evaluate the express limitation that refers to creating a digitized manipulator that can be fitted onto a "conventional non-digital" stereotaxic holder.

Similarly, for reasons described above, the Examiner cannot simply assert that complex, sophisticated, and expensive components or system that were initially developed for human

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surgery, or for computerized machine shops, can simply be imported into the field of stereotaxic holders for rats. Any such assertions by the Examiner are rendered incorrect and inappropriate, in view of two major factors: (1) the economic and "why should we learn a new system?" constraints that strongly apply in this particular market segment, as briefly discussed above; and, (2) the facts and events described in the affidavits, which clearly show that BOTH competitor companies tried to match the accomplishments of the Applicant company, but failed for a full year and a half (and, when they eventually succeeded, it was only after they had obtained a copy of the Applicant's actual unit, under false pretenses, so they could disassemble and inspect it).

CONCLUSION

In view of the foregoing remarks and enclosed affidavits, it is believed that (i) non-obviousness has been conclusively shown, by facts set forth in sworn affidavits, and (ii) the claims, as previously amended, are in condition for allowance.

If any questions remain, please contact the undersigned attorney at 314-822-8558.

Respectfully submitted,

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